



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019,747	12/21/2001	Shuichi Watanabe	56779/70551	9936
21874	7590	11/18/2004	EXAMINER	
EDWARDS & ANGELL, LLP			REKSTAD, ERICK J	
P.O. BOX 55874			ART UNIT	PAPER NUMBER
BOSTON, MA 02205			2613	

DATE MAILED: 11/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/019,747	Applicant(s) WATANABE, SHUICHI	
	Examiner Erick Rekstad	Art Unit 2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 34-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 34-36, 40, 42, 43, 45, 47, 48, 50-55 and 57 is/are rejected.
- 7) ☐ Claim(s) 37-39, 41, 44, 46, 49 and 56 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is a first action for application no. 10/019,747 filed on December 21, 2001 in which claims 34-57 are presented for examination.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 34, 36, 51 and 54 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 5,819,286 to Yang et al.

[claim 34]

As shown in Figures 4 and 5, Yang teaches a motion picture retrieval information generating apparatus that generates retrieval information from retrieving motion picture data constituted of one or more scenes comprising:

A retrieval information generating section that generates retrieval information corresponding to each of said one or more scenes on the basis of said motion picture data, and

Wherein said retrieval information generating section comprises:

As shown in Figures 6 and 11, a first summary information generating means for forming plural spatially split blocks having a length of each of said scenes in a direction of the time axis obtained by spatially splitting said each of said scenes to generate summary information of a spatially split block unit (Col 5 Line 28-Col 6 Line 35, Col 7 Lines 15-24, and Col 10 Lines 1-15).

[claim 36]

As shown in Figure 6, the first summary information generating means spatially splits each of said scenes into a predetermined number of parts in each of two directions defined spatially (Col 6 Lines 24-26).

[claim 51]

As shown in Figure 4, Yang teaches a storage medium (130) in which retrieval information for retrieving motion picture data constituted of one or more scenes is stored together with correspondence information between said retrieval information and said motion picture data, and wherein said retrieval information comprises summary information with plural spatially split blocks having a length of each of said scenes in a direction of time axis as a unit, obtained by spatially splitting said each of said scenes (Col 5 Line 28-Col 6 Line 35, Col 7 Lines 15-24, and Col 10 Lines 1-15).

[claim 54]

As shown in Figure 5, Yang teaches the motion picture retrieval information managing apparatus (310-330). Yang teaches the system contains a read out section for reading retrieval information (270-300). The system further obtains a video clip based on the retrieval information (Col 7 Lines 25-48, Col 7 Lines 59-62, Col 9 Lines 44-55, Col 14 Lines 40-44, Col 16 Lines 41-60).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 34, 36, 40, 42, 43, 45, 47, 48, 50-55 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over 'Indexing and retrieval of the MPEG compressed video' by Kobla et al.

[34 and 36]

As shown in Figure 2, Kobla teaches an apparatus for motion picture retrieval information generating using MPEG compressed video. Kobla further teaches the selection of a key frame for each scene. Kobla teaches the ideal method of selecting key frames would be to compare each frame to every other frame in the scene and select the frame with the least difference from other frames in terms of a given similarity measure (Page 297 Col 2 Last Paragraph). The apparatus of Kobla uses the macroblocks to obtain the spatial and temporal features for the scene (Section 4). As taught by Kobla, MPEG frames for in a clip are divided into macroblocks (Section 2.1). It would have been obvious to one of ordinary skill in the art at the time of the invention that using the idea method for selecting key frames as taught by Kobla would be used in order to obtain a summary frame representative of a scene. Kobla further teaches using the key frame to obtain spatial features for indexing the scene (Section 4.1 and Section 5.1).

[claims 40 and 42]

Kobla further teaches the use of temporal information in addition to the spatial information for indexing scenes (Section 5 and 5.2).

[claims 43 and 45]

The feature extraction method of Kobla further teaches the storage of a type-independent representation of the key frame. Which provides an independent frame containing a summary of the spatial and temporal features of a scene (Section 4). It would have been obvious to one of ordinary skill in the art at the time of the invention that the final step of creating a type-independent representation would be a third summary information means.

[claims 47, 48, and 50]

Kobla teaches the retrieval means for comparing a desired picture with one or more scenes as required by claim 47 (Sections 5 and 5.1, Fig. 2). Kobla further teaches the retrieval means also compares temporal similarity as required by claims 48 and 50 (Section 5.2).

[claims 51, 52, and 53]

As shown in Figure 2, Kobla teaches the storage means (database) for holding the spatial and temporal summary information along with a corresponding scene (Abstract and Section 2.3).

[claims 54, 55 and 57]

As shown in Figure 2, Kobla teaches the steps of reading out retrieval information (query). The query is then processed and compared with the summery data in the database in order to provide a video clip that satisfies the query (Section 5). It would have been obvious to one of ordinary skill in the art at the time of the invention to perform the task as taught by Kobla in units as this is well known in the art (Official Notice).

Claim 35 rejected under 35 U.S.C. 103(a) as being unpatentable over Yang in view of US Patent 5,778,108 to Coleman.

[claim 35]

Yang teaches the apparatus of claim 34. Yang further teaches the use of video clips (abstract). Yang does not specifically teach how to obtain the clips. Coleman teaches a scene detection system which divides a video into scenes for indexing (Col 2 Lines 14-59, Figs. 1 and 2). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the apparatus of Yang with the scene detection system of Coleman in order to divide a video into scenes for indexing.

Allowable Subject Matter

Claims 37-39, 41, 44, 46, 49, 56 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent 6,400,890 to Nagasaka et al.

US Patent 5,805,733 to Wang et al.

US Patent 5,485,611 to Astle.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erick Rekstad whose telephone number is 703-305-5543. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 703-305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Erick Rekstad
Examiner
AU 2613 
(703) 305-5543
erick.rekstad@uspto.gov


CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600